WHAT IS CLAIMED IS:

1. A method of managing a plurality of queues of a terminal operating in satellite communications system, the method comprising:

storing packets in the plurality of queues; and

dynamically changing a depth of one of the plurality of queues according to a prescribed scheme, the prescribed scheme specifying a new depth of the one queue based upon past bandwidth allocations associated with the one queue.

2. The method according to Claim 1, further comprising:

examining traffic statistics associated with the one queue for a pre-determined period.

3. The method according to Claim 1, wherein the one queue in the changing step uses an entire channel rate, the prescribed scheme permitting the new depth to equal a total memory size.

4. The method according to Claim 1, wherein the plurality of queues in the storing step is sharing a channel rate, the prescribed scheme specifying the new depth based upon successful transfer of packets stored within the one queue.

5. The method according to Claim 1, wherein the changing step comprises:

designating a minimum queue depth for each of the plurality of queues.

6. The method according to Claim 1, further comprising:

dropping subsequent packets entering the one queue if the new depth of the queue is exceeded.

7. The method according to Claim 1, wherein the plurality of queues in the storing step is weighted according to user services.

8. The method according to Claim 1, wherein the plurality of queues in the storing step corresponds to user services that include constant rate service and burst service.

9. The method according to Claim 1, wherein the plurality of queues in the storing step is logical queues.

10. A terminal apparatus for transmitting packets to a satellite communications system, comprising:

a plurality of queues configured to store the packets; and

a queue control logic configured to dynamically change depths of the plurality of queues according to a prescribed scheme, wherein the prescribed scheme specifies new depths of the plurality of queues based upon past bandwidth allocations associated with the respective plurality of queues.

11. The apparatus according to Claim 10, wherein the queue control logic is configured to examine traffic statistics associated with the respective plurality of queues for a pre-determined period.

12. The apparatus according to Claim 10, wherein one of the plurality of queues uses an entire channel rate, the prescribed scheme permitting the new depth of the one queue to equal a total memory size.

13. The apparatus according to Claim 10, wherein the plurality of queues are sharing a channel rate, the prescribed scheme specifying the new depths based upon successful transfer of packets stored within the plurality of queues.

14. The apparatus according to Claim 10, wherein the queue control logic designates a minimum queue depth for each of the plurality of queues.

15. The apparatus according to Claim 10, further comprising:

a queue drop control logic coupled to the plurality of queues and configured to drop subsequent packets entering the plurality of queues if the respective new depths of the plurality of queues are exceeded.

16. The apparatus according to Claim 10, wherein the plurality of queues are weighted according to user services.

17. The apparatus according to Claim 10, wherein the plurality of queues corresponds to user services that include constant rate service and burst service.

18. The apparatus according to Claim 10, wherein the plurality of queues is logical queues.

19. The apparatus according to Claim 10, further comprising:

a bandwidth-on-demand control logic configured to forward bandwidth-on-demand request packets to the plurality of queues.

20. The apparatus according to Claim 10, further comprising:

a queue servicing logic configured to forward the packets stored in the plurality of queues to an uplink channel of the satellite communications system.

21. A satellite communications system comprising:

a hub configured to control bandwidth allocations in conjunction with a satellite; and

a plurality of terminals configured to issue bandwidth allocation requests to the satellite, each of the terminals comprising,

a plurality of queues configured to store the packets, and

a queue control logic configured to dynamically change depths of the plurality of queues according to a prescribed scheme, wherein the prescribed scheme specifies new depths of the plurality of queues based upon past bandwidth allocations associated with the respective plurality of queues.

22. The system according to Claim 21, wherein the queue control logic is configured to examine traffic statistics associated with the respective plurality of queues for a pre-determined period.

23. The system according to Claim 21, wherein one of the plurality of queues uses an entire channel rate, the prescribed scheme permitting the new depth of the one queue to equal a total memory size.

24. The system according to Claim 21, wherein the plurality of queues is sharing a channel rate, the prescribed scheme specifying the new depths based upon successful transfer of packets stored within the plurality of queues.

25. The system according to Claim 21, wherein the queue control logic designates a minimum queue depth for each of the plurality of queues.

26. The system according to Claim 21, wherein each of the plurality of terminals further comprises:

a queue drop control logic coupled to the plurality of queues and configured to drop subsequent packets entering the plurality of queues if the respective new depths of the plurality of queues are exceeded.

27. The system according to Claim 21, wherein the plurality of queues are weighted according to user services.

28. The system according to Claim 21, wherein the plurality of queues corresponds to user services that include constant rate service and burst service.

29. The system according to Claim 21, wherein the plurality of queues is logical queues.

30. The system according to Claim 21, wherein each of the plurality of terminals further comprises:

a bandwidth-on-demand control logic configured to forward bandwidth-on-demand request packets to the plurality of queues.

31. The system according to Claim 21, wherein each of the plurality of terminals further comprises:

a queue servicing logic configured to forward the packets stored in the plurality of queues to an uplink channel of the satellite communications system.

32. A terminal apparatus for transmitting packets to a satellite communications system, comprising:

means for storing packets in the plurality of queues; and

means for dynamically changing a depth of one of the plurality of queues according to a prescribed scheme, the prescribed scheme specifying a new depth of the one queue based upon past bandwidth allocations associated with the one queue.

33. The apparatus according to Claim 32, further comprising:

means for examining traffic statistics associated with the one queue for a pre-determined period.

34. The apparatus according to Claim 32, wherein the one queue uses an entire channel rate, the prescribed scheme permitting the new depth to equal a total memory size.

35. The apparatus according to Claim 32, wherein the plurality of queues are sharing a channel rate, the prescribed scheme specifying the new depth based upon successful transfer of packets stored within the one queue.

36. The apparatus according to Claim 32, wherein the changing means designates a minimum queue depth for each of the plurality of queues.

37. The apparatus according to Claim 32, further comprising:

means for dropping subsequent packets entering the one queue if the new depth of the queue is exceeded.

38. The apparatus according to Claim 32, wherein the plurality of queues are weighted according to user services.

39. The apparatus according to Claim 32, wherein the plurality of queues correspond to the user services that include constant rate service and burst service.

40. The apparatus according to Claim 32, wherein the plurality of queues in the storing step is logical queues.

41. A computer-readable medium carrying one or more sequences of one or more instructions for managing a plurality of queues of a terminal operating in satellite communications system, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

storing packets in the plurality of queues; and

dynamically changing a depth of one of the plurality of queues according to a prescribed scheme, the prescribed scheme specifying a new depth of the one queue based upon past bandwidth allocations associated with the one queue.

42. The computer-readable medium according to Claim 41, wherein the one or more processors further perform the step of:

examining traffic statistics associated with the one queue for a pre-determined period.

43. The computer-readable medium according to Claim 41, wherein the one queue in the changing step uses an entire channel rate, the prescribed scheme permitting the new depth to equal a total memory size.

44. The computer-readable medium according to Claim 41, wherein the plurality of queues in the storing step is sharing a channel rate, the prescribed scheme specifying the new depth based upon successful transfer of packets stored within the one queue.

45. The computer-readable medium according to Claim 41, wherein the changing step comprises:

designating a minimum queue depth for each of the plurality of queues.

46. The computer-readable medium according to Claim 41, wherein the one or more processors further perform the step of:

dropping subsequent packets entering the one queue if the new depth of the queue is exceeded.

47. The computer-readable medium according to Claim 41, wherein the plurality of queues are weighted according to user services.

48. The computer-readable medium according to Claim 41, wherein the plurality of queues in the storing step corresponds to user services that include constant rate service and burst service.

49. The computer-readable medium according to Claim 41, wherein the plurality of queues in the storing step is logical queues.